



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-1019; Directorate Identifier 2013-CE-038-AD]

RIN 2120-AA64

Airworthiness Directives; SOCATA Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for SOCATA Model TBM 700 airplanes. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as landing gear actuator rod and piston becoming unscrewed during operation and the landing gear actuator ball joint becoming uncrimped. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,

West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact SOCATA - Direction des Services – 65921 Tarbes Cedex 9 – France; telephone +33 (0) 62 41 7300, fax +33 (0) 62 41 76 54, or for North America: SOCATA NORTH AMERICA, 7501 South Airport Road, North Perry Airport, Pembroke Pines, Florida 33023; telephone: (954) 893-1400; fax: (954) 964-4141; email: mysocata@socata.daher.com; Internet: <http://mysocata.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: albert.mercado@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-1019; Directorate Identifier 2013-CE-038-AD” at the

beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD No.: 2013-0227, dated September 23, 2013 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During maintenance check, possible unscrewing of rod and piston during operation was detected on a landing gear actuator. Investigation showed that this was likely caused by maintenance operation not conforming with the procedure described in the SOCATA maintenance manual.

Moreover, following in-service landing gear collapse, uncrimping of a right hand main landing gear (MLG) actuator ball joint was detected. Investigation revealed a manufacturing non-conformity of some actuator rod end assemblies.

These conditions, if not detected and corrected, could lead to MLG or nose landing gear (NLG) failure during landing or roll-out and consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, SOCATA issued Service Bulletin (SB) 70-197-32 to require a one-time inspection of the landing gear actuator piston/rod and SB 70-206-32 to require a one-time inspection of the landing gear actuator ball joint centering and, depending on findings, accomplishment of corrective actions.

SOCATA also developed modification 70-0334-32, embodied in production to secure rod/piston assembly through addition of a pin and to reduce retraction /extension indication failure through improvement of switch kinematics. These modified actuators have a new part number (P/N).

For the reasons described above, this AD requires a one-time inspection of the landing gear actuators piston/rod and ball joint centering and, depending on findings, accomplishment of applicable corrective actions.

You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1019.

Relevant Service Information

SOCATA has issued DAHER-SOCATA Mandatory Service Bulletin SB 70-197, dated April 2013; and DAHER-SOCATA Mandatory Service Bulletin SB 70-206, dated April 2013. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 495 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$84,150, or \$170 per product.

In addition, we estimate that any necessary follow-on actions would take about 3 work-hours for each main landing gear and 3 work-hours for the nose landing gear, and require parts costing \$100 for each rod and assembly. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

SOCATA: Docket No. FAA-2013-1019; Directorate Identifier 2013-CE-038-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to SOCATA TBM 700 airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as the

landing gear actuator rod and piston becoming unscrewed during operation and the landing gear actuator ball joint becoming uncrimped. We are issuing this AD to detect and correct discrepancies in the pistons/rods and the ball joint centering of the nose landing gear and main landing gear, which could result in landing gear failure and lead to damage of the airplane and occupant injury.

(f) Actions and Compliance

Unless already done, do the actions in paragraphs (f)(1) through (f)(4) of this AD on any airplane with the landing gear actuators part number (P/N) T700A3230050000, P/N T700A323005000000, or P/N T700A323005300000 installed:

(1) Within the next 8 months after the effective date of this AD, perform a detailed visual inspection (DVI) of the pistons and rods of the nose landing gear (NLG) and left hand (LH) and right hand (RH) main landing gear (MLG) actuators and measure the distance following the Accomplishment Instructions paragraphs (A)(1) through (A)(4) in DAHER-SOCATA Mandatory Service Bulletin SB 70-197, dated April 2013.

(2) Within the next 8 months after the effective date of this AD, perform a DVI of the ball joint centering of the NLG and LH and RH MLG actuators and measure the ball joint mismatch following the Accomplishment Instructions paragraphs (A) through (C) in DAHER-SOCATA Mandatory Service Bulletin SB 70-206, dated April 2013.

(3) If during any inspection required in paragraphs (f)(1) or (f)(2) of this AD any discrepancy is found, before further flight, replace the affected actuator or rod end assembly if applicable with an airworthy part following the Accomplishment Instructions in paragraph (A)(5) through (A)(10) and paragraph (B) of DAHER-SOCATA Mandatory Service Bulletin SB 70-197, dated April 2013; and/or paragraph (D) and (E) of DAHER-SOCATA Mandatory Service Bulletin SB 70-206, dated April 2013.

(4) As of the effective date of this AD, do not install on any airplane a landing gear actuator P/N T700A3230050000, P/N T700A323005000000, or P/N T700A323005300000, unless it is found to be in compliance with the inspection requirements of paragraphs (f)(1) and (f)(2) of this AD. The landing gear actuator must be installed when doing these inspections.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: albert.mercado@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2013-0227, dated September 23, 2013 for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1019. For service information related to this AD, contact SOCATA - Direction des Services – 65921 Tarbes Cedex 9 – France; telephone +33 (0) 62 41 7300, fax +33 (0) 62 41 76 54, or for North America: SOCATA NORTH

AMERICA, 7501 South Airport Road, North Perry Airport, Pembroke Pines, Florida 33023; telephone: (954) 893-1400; fax: (954) 964-4141; email: mysocata@socata.daher.com; Internet: <http://mysocata.com>. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on November 27, 2013.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

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